

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A10NM  
Revision 14  
Sidney Conn (Galaxy Balloons)  
Newport  
Galaxy-7  
Galaxy-8  
Galaxy-9  
Galaxy 6  
Galaxy 7B  
Galaxy 8B  
Galaxy 9B  
Galaxy 10  
Galaxy 11  
Galaxy 11B  
Galaxy 77

November 15,2000

TYPE CERTIFICATE DATA SHEET NO. A10NM

This data sheet, which is a part of Type Certificate A10NM, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

TYPE CERTIFICATE HOLDER: Sidney Conn  
143 Malibu Road  
Mooresville, North Carolina 28117

I. Model Newport, Hot Air Balloon, Approved July 7, 1982

Air Heater General Balloon, Burner Assembly Dwg. No. 8201

Gondola General Balloon, Basket Assembly Dwg. No. 8501

FuelPropane (LPG) only

Maximum Weight Gross weight limited to 1680 lbs; or to weight limited by maximum continuous envelope temperature of 250 degrees F., whichever is less. See Balloon Flight Manual.

Allowable Envelope Temperature  
1. Never exceed: 300 degrees F.  
2. For no longer than 10 minutes continuous, or 10 minutes per two hours of flight: 250 to 300 degrees F.  
3. Maximum continuous: 250 degrees F.

Fuel Capacity One, two, three or four ten-gallon Worthington 43.4 lb aluminum LPG cylinders, Model 4100-U4-15, or Manchester 43 lb steel LPG cylinders, Model FL-519.

Serial Nos. Eligible 8007 and subsequent.

Page No.	1	2	3	4	5	6	7	8	9	10
Rev. No.	14	12	12	12	12	13	13	14	14	14

II. Model Galaxy-7, Hot Air Balloon, Approved May 15, 1986

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4048 or 4860.
FuelPropane (LPG) only	
Maximum Weight	1680 pounds (this weight includes the envelope weight)
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	C1017, GLX-1027 and subsequent.

III. Model Galaxy-8, Hot Air Balloon, Approved May 22, 1989

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). Two required. (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4860DB, 6072, or 6072T or TBW Carriage Models 3.9, 4.0, 4.5, 4.9, 4.9DB, S5.0, S5.0DB, 5.0, 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	
Maximum Weight	2400 pounds (this weight includes the envelope weight)
Minimum Weight	1000 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX-1018 and subsequent.

IV. Model Galaxy-9, Hot Air Balloon, Approved Nov 18, 1988

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). Two required. (See Note 6)
Gondola	Galaxy Balloons Carriage Models 6072, 6072T, or 6096 or TBW Carriage Models 4.9DB, S5.0DB, 5.0DB, 5.9, or 6.0.

FuelPropane (LPG) only

Maximum Weight	3000 pounds (this weight includes the envelope weight)
Minimum Weight	1000 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	9001 and subsequent.

V. Model Galaxy 6, Hot Air Balloon, Approved June 11, 1993

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4048 or 4860 or TBW Carriage Models 3.9, 4.0, 4.5, 4.9, S5.0, or 5.0.
FuelPropane (LPG) only	
Maximum Weight	1200 pounds (this weight includes the envelope weight)
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 1016 and subsequent.

VI. Model Galaxy 7B, Hot Air Balloon, Approved June 11, 1993

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4048 or 4860 or TBW Carriage Models 3.9, 4.0, 4.5, 4.9, S5.0, or 5.0.
FuelPropane (LPG) only	
Maximum Weight	1300 pounds (this weight includes the envelope weight)
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 1017B and subsequent.

VII. Model Galaxy 8B, Hot Air Balloon, Approved June 11, 1993

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). One or two allowed. (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4860 or 4860DB or TBW Carriage Models 3.9, 4.0, 4.5, 4.9, 4.9DB, S5.0, S5.0DB, 5.0, 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	
Maximum Weight	1900 pounds (this weight includes the envelope weight)
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 1018B and subsequent.

VIII. Model Galaxy 9B, Hot Air Balloon, Approved June 11, 1993

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). Two required. (See Note 6)
Gondola	Galaxy Balloons Carriage Model 6072 or 6072T or TBW Carriage Models 4.9DB, S5.0DB, 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	
Maximum Weight	2800 pounds (this weight includes the envelope weight)
Minimum Weight	1400 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 1019B and subsequent.

IX. Model Galaxy 10, Hot Air Balloon, Approved June 11, 1993

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). Two required. (See Note 6)
Gondola	Galaxy Balloons Carriage Models 6072, 6072T, 6096, or 60120 or TBW Carriage Models 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	

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Maximum Weight	3600 pounds (this weight includes the envelope weight)
Minimum Weight	1400 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 10110 and subsequent.

X. Model Galaxy 11, Hot Air Balloon, Approved June 15, 1994

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). Two required.
Gondola	Galaxy Balloons Carriage Models 6072, 6072T, 6096, or 60120 or TBW Carriage Models 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	
Maximum Weight	3940 pounds (this weight includes the envelope weight)
Minimum Weight	2300 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 10111 and subsequent.

XI. Model Galaxy 11B, Hot Air Balloon, Approved May 14, 1999

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). (Two required)(See Note 6)
Gondola	Galaxy Balloons Carriage Models 6072, 6072T, 6096, or 60120 or TBW Carriage Models 5.0DB, 5.9, or 6.0.
FuelPropane (LPG) only	
Maximum Weight	3600 pounds (This weight includes the envelope weight)
Minimum Weight	2300 pounds
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 1011B and subsequent.

XII. Model Galaxy 77, Hot Air Balloon, Approved July 31, 2000

Air Heater	Galaxy Balloons Burner Assembly Dwg. No. A1G400 (Balloon Works Model T3-017) or Galaxy Balloons Burner Assembly Dwg. No. A1G401 (Balloon Works Model F1 Mirage). (See Note 6)
Gondola	Galaxy Balloons Carriage Models 4860 or TBW Carriage Models 3.9, 4.0, 4.5, 4.9, S5.0, or 5.0.
FuelPropane (LPG) only	
Maximum Weight	1750 pounds (This weight includes the envelope weight)
Maximum Allowable Envelope Temperature	300 degrees F.
Fuel Capacity	See Note 7
Serial Nos. Eligible	GLX 10177 and subsequent.

DATA PERTINENT TO ALL MODELS

Certification Basis	FAR 31, effective July 1, 1964. Amendments 31-1 through 31-3. Application for Type Certificate dated June 6, 1978. Type Certificate No. A10NM issued July 7, 1982; reissued September 9, 1983; reissued July 19, 1985; amended May 15, 1986; November 18, 1988; May 22, 1989; September 1, 1989; July 20, 1992; reissued and amended June 11, 1993; amended June 15, 1994; amended December 31, 1997; amended May 14, 1999.
Production Basis	Model Newport: None. Prior to original certification of each balloon manufactured under this Type Certificate, an FAA representative must perform a detailed inspection for workmanship, materials and conformity with this approved technical data and a check of the flight characteristics.
Models Galaxy-7, Galaxy-8, Galaxy-9, Galaxy 6, Galaxy 7B, Galaxy 8B, Galaxy 9B, Galaxy 10, Galaxy 11, and Galaxy 11B:	Production Certificate No. PC325CE, issued September 19, 1986.
Export Eligibility	Balloon will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with Federal Aviation Regulation Part 21, Subpart L, Sections 21.321 through 21.339. The applicable procedures are contained in Advisory Circular No. 21-2F.
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following equipment must be installed:</p> <ul style="list-style-type: none"> <li>A. Newport: <ul style="list-style-type: none"> <li>1. General Balloon FAA approved Equipment List No. 2000 dated July 7, 1982.</li> <li>2. General Balloon FAA approved Flight Manual dated June 28, 1982.</li> </ul> </li> <li>B. Galaxy-7: FAA approved Balloon Flight Manual dated May 15, 1986.</li> <li>C. Galaxy-8: FAA approved Balloon Flight Manual dated May 22, 1989.</li> <li>D. Galaxy-9: FAA approved Balloon Flight Manual dated Nov 18, 1988.</li> <li>E. Galaxy 6: FAA approved Balloon Flight Manual dated June 11, 1993.</li> <li>F. Galaxy 7B: FAA approved Balloon Flight Manual dated June 11, 1993.</li> <li>G. Galaxy 8B: FAA approved Balloon Flight Manual dated June 11, 1993.</li> <li>H. Galaxy 9B: FAA approved Balloon Flight Manual dated June 11, 1993.</li> <li>I. Galaxy 10: FAA approved Balloon Flight Manual dated June 11, 1993.</li> <li>J. Galaxy 11: FAA approved Balloon Flight Manual dated June 15, 1994.</li> <li>K. Galaxy 11B: FAA approved Balloon Flight Manual dated May 14, 1999.</li> <li>L. Galaxy 77: FAA approved Balloon Flight Manual dated July 31, 2000.</li> </ul>

Maintenance Inspections      Newport: See Piccard Balloon Hot Air Sport Balloon and Maintenance Handbook, Section 3 for Annual and 100-Hour Inspections required by FAR 91.409.

Galaxy-7, Galaxy-8, Galaxy-9, Galaxy 6, Galaxy 7B, Galaxy 8B, Galaxy 9B, Galaxy 10, Galaxy 11, Galaxy 11B and Galaxy 77: See Galaxy Repair and Maintenance Manual.

Note 1.      Current weight report, including list of equipment included in certificated empty weight and loading instructions must be provided for each balloon at the time of original certification.

Note 2.      Reserved

Note 3.      Reserved

- Note 4.      A.      Prior to shipment of a balloon envelope (and necessary attaching system), produced for use with a burner/basket assembly that is eligible for use with that envelope, the Production Approval holder must determine that the envelope and necessary attaching system conforms to the Type Design and is in a condition for safe operation. A Statement of Conformity, FAA Form 8130.9, may be used for this purpose. This envelope, in combination with the eligible burner/basket assembly may be registered and is eligible for issuance of a Standard Airworthiness Certificate when the applicant shows, and when the Administrator finds, that the envelope, burner and basket combination conforms to the Type Design and is in a condition for safe operation.
- B.      Balloon burner/basket assemblies specifically designed for quick removal and installation from one envelope to another may be accomplished by the pilot/owner who holds at least a Private Pilot Certificate. Appropriate entries must be made in the balloon records noting the removal and/or installation of burner/basket assemblies.
- C.      Appropriate entries into balloon records of burner/basket assembly removals and installations must be made by FAA-certificated mechanics if the pilot/owner is not eligible to accomplish the task.

Note 5.      Inflated appendages on standard shape envelopes are permitted and approved as described in Drawing B1G213, dated May 27, 1993, or latter FAA approved revision. Appendages must meet the same standards for strength as the balloon envelope and must be maintained in accordance with Galaxy Balloons Repair and Maintenance Manual.

Note 6.      The Balloon Works Model F1 burner is an approved optional heater for the Models Galaxy-7, Galaxy-8, Galaxy-9, Galaxy 6, Galaxy 7B, Galaxy 8B, Galaxy 9B, Galaxy 10, and Galaxy 11B and these standard shaped balloons with appendages. The Balloon Works F1 burner may be combined with a Balloon Works T3-017 burner in these double burner systems.

Note 7:      Fuel Capacity

- A.      Galaxy 4048 Basket: One, two, three or four 10-gallon FAA-approved propane cylinders. One Galaxy P/N C6G003 or TBW P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 4048 Basket may alternatively contain contain one, two, three or four 15-gallon FAA approved propane cylinders, Galaxy P/N B3G661-1 or TBW P/N 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners
- B.      Galaxy 4860 Basket: One, two, three, four, five or six 10-gallon FAA approved propane cylinders. One Galaxy P/N C6G003 or TBW P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 4860 Basket may alternatively contain one, two, three, four, five or six 15-gallon FAA approved propane cylinders, Galaxy P/N B3G661-1 or TBW P/N 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners.



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- C. Galaxy 4860DB Basket: Four, five or six 10-gallon FAA approved propane cylinders. Two TBW 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders may be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 4860DB Basket may alternatively contain four, five or six 15-gallon FAA approved propane cylinders, two Galaxy P/N B3G661-1 or TBW 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners.
- D. Galaxy 6072 or 6072T Basket:
- 1) For Galaxy-8 Balloon: Four, five, six, seven or eight 10-gallon FAA approved propane cylinders. Two TBW P/N 3229, 3229-1, or 3229-2 must be installed in corner one or two. The remaining cylinders must be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 6072 and 6072T Baskets may alternatively contain four, five, six, seven or eight 15-gallon FAA approved propane cylinders, two Galaxy P/N B3G661-1 or TBW 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners.
  - 2) For all other approved balloon models: Six, seven or eight 10-gallon FAA approved propane cylinders. Two TBW P/N 3229, 3229-1, or 3229-2 must be installed in corner one or two. The remaining cylinders must be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 6072 and 6072T Baskets may alternatively contain six, seven or eight 15-gallon FAA approved propane cylinders, two Galaxy P/N B3G661-1 or TBW P/N 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners.
- E. Galaxy 6096 or 60120 Basket: Six, seven or eight 10-gallon FAA approved propane cylinders. Two TBW P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Galaxy P/N C6G001 or TBW P/N 3035, 3035-1 or 3035-2. The 6096 or 60120 Basket may alternatively contain six, seven or eight 15-gallon FAA approved propane cylinders, two Galaxy P/N B3G661-1 or TBW P/N 3661-1 in corner one or two and Galaxy P/N B3G661-2 or TBW P/N 3661-2 in the other corners.
- F. TBW Carriage Models 3.9 and 4.9: One, two, three or four 10-gallon FAA approved propane cylinders. One Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1, 3035-2 or 3258. Models 3.9 and 4.9 may alternately contain one or two 15-gallon FAA approved propane cylinders, Balloon Works P/N 3661-2 installed in corners 2 or 3 only.
- G. TBW Carriage Models 4.0 and 4.5: One, two or three 10-gallon FAA approved propane cylinders. One Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1, 3035-2 or 3258. Models 4.0 and 4.5 may alternately contain one, two or three 15-gallon FAA approved propane cylinders, Balloon Works P/N 3661-1 in corner one or two and Balloon Works P/N 3661-2 in the other corners.
- H. TBW Carriage Models 5.0 and S5.0: One, two, three, four, five, or six 10-gallon FAA approved propane cylinders. Two Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1, 3035-2 or 3258.
- I. TBW Carriage Model 4.9DB (two burners installed): Two, three or four 10-gallon FAA approved propane cylinders. Two Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1 or 3035-2. The size 4.9DB basket may alternately contain one or two 15-gallon FAA approved propane cylinders, Balloon Works P/N 3661-2 installed in corners 2 or 3 only.

- J. TBW Carriage Models 5.0DB and S5.0DB (two burners installed): Six 10-gallon FAA approved propane cylinders. Two Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining tanks must be Balloon Works P/N 3035, 3035-1 or 3035-2.
- K. TBW Carriage Model 5.9: Six or seven 10-gallon FAA approved propane cylinders. Two Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1 or 3035-2.
- L. TBW Carriage Model 6.0: Seven, eight, or nine 10-gallon FAA approved propane cylinders. Two Balloon Works P/N 3229, 3229-1 or 3229-2 must be installed in corner one or two. The remaining cylinders must be Balloon Works P/N 3035, 3035-1 or 3035-2. The size 6.0 basket may alternately contain one or two 15-gallon FAA approved propane cylinders, Balloon Works P/N 3661-2 installed in corners 2 or 3 only.

Note 8

Some TBW Carriage Model numbers contain the suffix "A1." The TBW Carriage Models 3.9, 4.0, 4.5, 4.9, S5.0, and 5.0 are identical to the TBW Carriage Models 3.9A1, 4.0A1, 4.5A1, 4.9A1, S5.0A1, and 5.0A1 respectively, and may be used interchangeably.

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